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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,739	03/22/2005	Francois Seneschal	FR02 0098 US	6985
65913	7550	10/07/2009	EXAMINER	
NXP, B.V. NXP INTELLECTUAL PROPERTY & LICENSING M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			CHAN, RICHARD	
			ART UNIT	PAPER NUMBER
			2618	
			NOTIFICATION DATE	DELIVERY MODE
			10/07/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

### Office Action Summary

**Application No.**

10/528,739

**Applicant(s)**

SENESCHAL ET AL.

**Examiner**

RICHARD CHAN

**Art Unit**

2618

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 7/23/09.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-9, 11, 12, and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-9, 12, 14-17 and 20-22 is/are rejected.
- 7) ☒ Claim(s) 11, 13, 18, 19 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/23/09 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1,2,4-9 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1, 2, 4-9, 12, 14-17, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Petsko et al. (US 6,018,650) in view of Iwaguchi et al. (US 2004/0129784).

Regarding claim 1, Petsko teaches the device for determining the level of an input signal intended to be applied to a receiving system, said receiving system comprising arranged in series a set of discrete gain amplifiers, a selective filter, a mixer within Receiver Circuitry 42, said receiving system being intended to deliver an output signal, said device comprising:

measuring means for measuring the level of said output signal in a given frequency channel, RSSI Block 42 (Col.6 line 3-5)

means for determining the real gain of said set of amplifiers in said given frequency channel, wherein a gain of each amplifier in said set of amplifiers is determined by determining a deviation from a nominal gain value of each of said amplifiers in said given frequency channel, (Col.5 line 36-43)

means for determining the real gain of said selective filter in said given frequency channel; and (Col.6 line 47-54)

calculation means for deriving a digital measure of the level of the input signal from the level of the output signal, the real gain of said set of amplifiers and from the real gain of said selective filter. (Col.6 line 35-46)

The Petsko reference however does not specifically disclose wherein the real gain of said selective filter is given by a set of equations for different ranges of frequency channels, wherein each of the equations is used for a unique range of frequency channels.

The Iwaguchi reference however specifically discloses in paragraph 0206-0208 a set of equations, specifically band limiting equations (2-5) wherein the filter characteristic is identified by the gain characteristic. The module frequency variable of the equations below determine the gain characteristic.

It would have been obvious to one of ordinary skill in the art to implement the filter gain selection by a set of equations as disclosed by Iwaguchi to the device determining the level of an input as disclosed by Petsko in order to calculate the specific real gain of each frequency channel based on the channel properties.

Regarding claim 2, Petsko and Iwaguchi combined teaches wherein the device as claimed in claim 1 where the real gain of said selective filter for each of said frequency channels is given by a set of equations defined by a set of coefficients specified for each of said frequency channels. (Col.9 line 25-37)

Regarding claim 3, Petsko and Iwaguchi combined teaches wherein the device as claimed in claim 2, comprising additional means for averaging the level of said output signal. (Col.12 line 57- Col.13 line 7)

Regarding claim 5, Petsko and Iwaguchi combined teaches the device as claimed in claim 1 wherein the deviation from said nominal gain of each amplifier in said set of amplifiers is given by a look-up having first input corresponding to said given

frequency channel, and a second input corresponding to the nominal gain of said corresponding amplifiers. (Col.6 line 49-54)

Regarding claim 6, Petsko and Iwaguchi combined teaches wherein the device as claimed in claim 5 where said measuring means comprise a selective filter 82a for selecting said given frequency channel, a logarithmic detector and an analog-to-digital converter 86 for delivering the level of said output signal in said given frequency channel. (Col.8 line 1-23)

Regarding claim 7, Petsko teaches wherein the method for determining the level of an input signal intended to be applied to a receiving system, said receiving system comprising arranged in series a set of discrete gain amplifiers, a selective filter, a mixer, said receiving system being intended to deliver an output signal, Receiver Circuitry 42 said method comprising:

a measuring step for measuring the level of said output signal in a given frequency channel, RSSI Block 42 (Col.6 line 3-5)

a processing step for determining the real gain of said set of amplifiers in said given frequency channel, wherein a  $R_{gain}$  of each amplifier in said set of amplifiers is determined by determining a deviation from a nominal gain value of each of said amplifiers in said given frequency channel, (Col.5 line 36-43)

a first calculation step for determining the real gain of said selective filter in said given frequency channel, wherein said selective filter gain for each of said frequency

channels is given by a set of equations defined by a set of coefficients specified for each of said frequency channels, (Col.9 line 25-37)

a second calculation step for deriving a digital measure of the level of the input signal from the level the output signal, from the real gain of said set of amplifiers and from the real gain of said selective filter. (Col.8 line 1-23)

The Petsko reference however does not specifically disclose wherein the real gain of said selective filter is given by a set of equations for different ranges of frequency channels, wherein each of the equations is used for a unique range of frequency channels.

The Iwaguchi reference however specifically discloses in paragraph 0206-0208 a set of equations, specifically band limiting equations (2-5) wherein the filter characteristic is identified by the gain characteristic. The module frequency variable of the equations below determine the gain characteristic.

It would have been obvious to one of ordinary skill in the art to implement the filter gain selection by a set of equations as disclosed by Iwaguchi to the device determining the level of an input as disclosed by Petsko in order to calculate the specific real gain of each frequency channel based on the channel properties.

Regarding claim 8, Petsko and Iwaguchi combined teaches wherein the receiving box for multimedia signals or modem comprising a device as claimed in claim 1.

Abstract

Regarding claim 9, Petsko and Iwaguchi combined teaches wherein the signal generated by the method as claimed in claim 7, said signal indicating the level of the input signal. (Col.5 line 36-43)

Regarding claim 4, the Petsko and Iwaguchi combined reference teaches wherein the device as claimed in claim 2, however does not specifically teach wherein the device is further comprising additional means for rounding the level of said input signal to the nearest half value.

The examiner takes Official Notice of wherein a device will round the values calculated to the nearest half value.

It would have been obvious to one of ordinary skill in the art to implement the practice of nearing the measured value to the nearest half value to the device of Petsko in order to maintain a uniform value rating of the measured values.

5. Claims 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Petsko et al (US 6,018,650) in view of Iwaguchi et al. (US 2004/0129784) in view of Mcgirr et al. (US 5,129,098.)

Regarding claims 12 and 14, the Petsko and Iwaguchi combined disclose the device of claim 1 however neither the Petsko and/or Iwaguchi reference specifically disclose wherein the measuring of the given frequency channel to produce successive measurements of the level of said output signal in said given frequency channel and



calculating an average of said successive measurements of the level of said output signal in said given frequency channel.

The McGirr reference however teaches wherein an RSSI module for a radio telephone specifically discloses wherein samplings of an RSSI signal from an A/d 82. These samplings occur at fixed intervals and therefore are interpreted as "successive intervals". The McGirr reference continues to disclose wherein the samplings are added and then processed by an RSSI Average, by dividing RSSI SUM to obtain an properly measure the RSII readings. (Col.6 line 34-64)

It would have been obvious to one of ordinary skill in the art to implement the RSII average bloc as taught by McGirr to the device of Petsko and Iwaguchi combined in order to calculate the a RSSI reading that is now skewed by short term readings that could skew the readings of the instant RSSI indicator.

Regarding claims 15, 17, 20, 21, and 22, Petsko and Iwaguchi combined disclose the device as claimed in claim 1, Iwaguchi oontinues to disclose wherein each of the equations is defined by a set of coefficients. (Equations 2-5)

#### ***Allowable Subject Matter***

6. Claims 11, 13, 18, 19, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD CHAN whose telephone number is (571)272-0570. The examiner can normally be reached on Mon - Fri (9AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nay A. Maung/  
Supervisory Patent Examiner, Art Unit 2618

/Richard Chan/  
Examiner, Art Unit 2618